

Chemical Analysis Report

CEN-DIST-2019-04-02-03

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Whip / Coon / Center**
Request ID: **RQ-2019-03-04-57**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 22-APR-2019 15:11

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored background.

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical group are included in this report: Nutrients.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: SJR upstream of Lake Hellen Blazes

Collection Date/Time: 04/01/2019 11:58

Field ID: G3CE0018

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2074340	EPA 180.1 Rev. 2.0	Turbidity	4.4		NTU	P361446	
	EPA 300.0 Rev. 2.1	Chloride	99		mg Cl/L	P361866	
		Sulfate	29		mg SO4/L	P361868	
	SM 2120 B	Color (true)	110		PCU	P361467	
	SM 2320 B-97	Total Alkalinity	127		mg CaCO3/L	P361854	
	SM 2540 C-97	TDS	404		mg/L	P361826	
	SM 2540 D-97	TSS	8	I	mg/L	P361665	
	SM 4500 F-C-97	Fluoride	0.22		mg F/L	P362443	
2074342	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P361702	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P361564	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P361484	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P361578	
	SM 5310 B-00	Organic Carbon	23		mg C/L	P361613	
2074344	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.087		mg P/L	P361436	

Ref. Method and Comment:

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample

Sample Location: SJR at inlet to Little Lake Sawgrass

Collection Date/Time: 04/01/2019 12:40

Field ID: G3CE0017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2074341	EPA 180.1 Rev. 2.0	Turbidity	5.4	A	NTU	P361446	
	EPA 300.0 Rev. 2.1	Chloride	140		mg Cl/L	P361866	
		Sulfate	47		mg SO4/L	P361868	
	SM 2120 B	Color (true)	97		PCU	P361467	
	SM 2320 B-97	Total Alkalinity	111		mg CaCO3/L	P361854	
	SM 2540 C-97	TDS	505		mg/L	P361826	
	SM 2540 D-97	TSS	9	I	mg/L	P361665	
	SM 4500 F-C-97	Fluoride	0.21		mg F/L	P362443	
2074343	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P361702	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P361564	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P361484	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P361578	
	SM 5310 B-00	Organic Carbon	21		mg C/L	P361613	
2074345	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.045		mg P/L	P361437	

Ref. Method and Comment:

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P361446

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361866

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361868

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361702

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361564

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361484

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361578

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361436

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361437

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B
Batch ID: P361467

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P361854

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-97
Batch ID: P361826

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P361665

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P362443

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P361613

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361866

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361868

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361702

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	104		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361564

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	98.6		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361484

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	102		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361578

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	98.7		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361436

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361437

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	102		P	90 - 110

Reference Method: SM 2120 B
Batch ID: P361467

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	102		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P361854

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P362443

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.3		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P361613

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	100		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361866

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074317	Chloride	98.0		P	90 - 110
2074381	Chloride	99.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361868

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074317	Sulfate	98.0		P	90 - 110
2074381	Sulfate	96.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361702

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074400	Ammonia-N	104	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361564

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074400	Kjeldahl Nitrogen	102	98.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361484

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074307	NO2NO3-N	100		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361436

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074344	O-Phosphate-P	94.6	96.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361437

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074345	O-Phosphate-P	94.0	96.4	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P362443

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074564	Fluoride	96.3	95.8	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P361613

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074384	Organic Carbon	100	100	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P361446

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074341	Turbidity	5.70	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361866

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074381	Chloride	0.239	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361868

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074381	Sulfate	0.544	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361702

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074400	Ammonia-N	0.707	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361564

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074400	Kjeldahl Nitrogen	2.13	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361484

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074307	NO2NO3-N	0.205	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361578

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074307	Total-P	0.776	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361436

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074344	O-Phosphate-P	1.15	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P361437

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074345	O-Phosphate-P	1.72	Spike	P	0 - 20

Reference Method: SM 2120 B
 Batch ID: P361467

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074306	Color (true)	5.36	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P361854

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074374	Total Alkalinity	1.01	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
 Batch ID: P361826

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074319	TDS	1.76	Sample	P	0 - 10

Reference Method: SM 2540 D-97
 Batch ID: P361665

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074319	TSS	8.22	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P362443

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074564	Fluoride	0.482	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
 Batch ID: P361613

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074384	Organic Carbon	0.350	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
 Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A90388

Included Lab Sample IDs: 2074344, 2074345

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	98.6	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A90389

Included Lab Sample IDs: 2074340, 2074341

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.0	P/P	95 - 105

Reference Method: SM 2120 B

Run ID: A90399

Included Lab Sample IDs: 2074340, 2074341

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	99.7	P/P	85 - 115

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A90407

Included Lab Sample IDs: 2074342, 2074343

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	102	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A90463

Included Lab Sample IDs: 2074342, 2074343

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A90502

Included Lab Sample IDs: 2074342, 2074343

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	104	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A90519

Included Lab Sample IDs: 2074342, 2074343

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A90527

Included Lab Sample IDs: 2074342, 2074343

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A90538

Included Lab Sample IDs: 2074340, 2074341

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	102	P/P	90 - 110
Sulfate	101	102	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A90560

Included Lab Sample IDs: 2074340, 2074341

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	103	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A90826

Included Lab Sample IDs: 2074340, 2074341

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.1	98.6	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					5.70	
EPA 300.0 Rev. 2.1	Chloride	100	99.3	98.0		0.239	
	Sulfate	99.1	96.0	98.0		0.544	
EPA 350.1 Rev. 2.0	Ammonia-N	104	104	105			0.707
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.6	102	98.5			2.13
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	102	100				0.205
EPA 365.1 Rev. 2.0	Total-P	98.7					0.776
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.5	94.6	96.7			1.15
	O-Phosphate-P	102	94.0	96.4			1.72
SM 2120 B	Color (true)	102				5.36	
SM 2320 B-97	Total Alkalinity	101				1.01	
SM 2540 C-97	TDS					1.76	
SM 2540 D-97	TSS					8.22	
SM 4500 F-C-97	Fluoride	97.3	96.3	95.8			0.482
SM 5310 B-00	Organic Carbon	100	100	100			0.350

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2074340, 2074341
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2074340, 2074341
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2074340, 2074341
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2074342, 2074343
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2074342, 2074343
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2074342, 2074343
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2074342, 2074343
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2074344, 2074345
SM 2120 B / E31780	True Color measured at 450 nm	2074340, 2074341
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2074340, 2074341
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2074340, 2074341
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2074340, 2074341
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2074340, 2074341
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2074342, 2074343

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	04/02/2019			04/02/2019 17:05	Adrian Shelby	2074340, 2074341
EPA 300.0 Rev. 2.1	04/02/2019			04/09/2019 19:41	Lipi Saha	2074340
	04/02/2019			04/09/2019 19:53	Lipi Saha	2074341
EPA 350.1 Rev. 2.0	04/02/2019			04/04/2019 14:35	Ping Hua	2074342
	04/02/2019			04/04/2019 14:37	Ping Hua	2074343
EPA 351.2 Rev. 2.0	04/02/2019	04/04/2019 15:00	Adrian Shelby	04/08/2019 10:46	Joseph Suarez	2074342
	04/02/2019	04/04/2019 15:00	Adrian Shelby	04/08/2019 10:48	Joseph Suarez	2074343
EPA 353.2 Rev. 2.0	04/02/2019			04/03/2019 11:13	Beverly Y. Sanders	2074342
	04/02/2019			04/03/2019 11:14	Beverly Y. Sanders	2074343
EPA 365.1 Rev. 2.0	04/02/2019	04/04/2019 13:35	Sima Feizi	04/05/2019 13:03	Rosalyn Ballman	2074342
	04/02/2019	04/04/2019 13:35	Sima Feizi	04/05/2019 13:04	Rosalyn Ballman	2074343
EPA 365.1 Rev. 2.0 dissolved	04/02/2019			04/02/2019 16:31	Jhamieka S. Greenwood	2074344
	04/02/2019			04/02/2019 16:35	Jhamieka S. Greenwood	2074345
SM 2120 B	04/02/2019			04/02/2019 16:41	Mariam Hanna	2074340
	04/02/2019			04/02/2019 16:42	Mariam Hanna	2074341
SM 2320 B-97	04/02/2019			04/09/2019 17:06	Samantha Davila	2074340
	04/02/2019			04/09/2019 17:19	Samantha Davila	2074341
SM 2540 C-97	04/02/2019			04/03/2019 15:14	Yijie Li	2074340, 2074341
SM 2540 D-97	04/02/2019			04/03/2019 15:14	Yijie Li	2074340, 2074341
SM 4500 F-C-97	04/02/2019			04/18/2019 08:00	Samantha Davila	2074340
	04/02/2019			04/18/2019 08:04	Samantha Davila	2074341
SM 5310 B-00	04/02/2019			04/04/2019 17:33	Julia Storbeck	2074342
	04/02/2019			04/04/2019 17:45	Julia Storbeck	2074343